

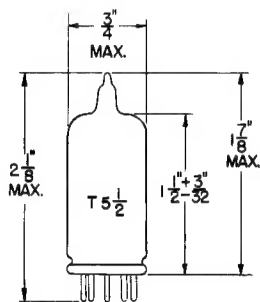
6AN5
Description and Rating
BEAM POWER AMPLIFIER
GENERAL DESCRIPTION

Principal Application: The 6AN5 is a miniature beam-power amplifier designed for use as a wide-band radio-frequency or video power amplifier in equip-

Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.45 Ampere
 Envelope: T-5½, Glass
 Base: E7-1, Miniature Button 7-Pin

ments with relatively low plate supply voltages. The tube is capable of operation at high plate current levels and exhibits a high transconductance.

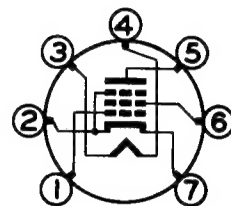
Mounting Position: Any
 Direct Interelectrode Capacitances: #
 Grid 1 to Plate (Max) 0.075 μmf
 Input 9.0 μmf
 Output 4.8 μmf

PHYSICAL DIMENSIONS


RTMA 5-2

TERMINAL CONNECTIONS

Pin 1 - Grid Number 1
 Pin 2 - Cathode and Beam Plates
 Pin 3 - Heater
 Pin 4 - Heater
 Pin 5 - Plate
 Pin 6 - Grid Number 2 (Screen)
 Pin 7 - Cathode and Beam Plates

BASING DIAGRAM

 RTMA 7BD
 BOTTOM VIEW

DESIGN CENTER VALUES:

Plate Voltage	120	300	Volts
Screen Voltage	120	300	Volts
Plate Dissipation	4.2	1.70	Watts
Screen Dissipation	1.4	0.56	Watts
Cathode Current	50	20	Milliamperes
Bulb Temperature at Any Point	140	140	Centigrade
Grid Number 1 Circuit Resistance			
With Fixed Bias *	0.1	0.1	Megohm
With Cathode Bias	0.1	0.1	Megohm

MAXIMUM RATINGS
CLASS A₁ AMPLIFIER

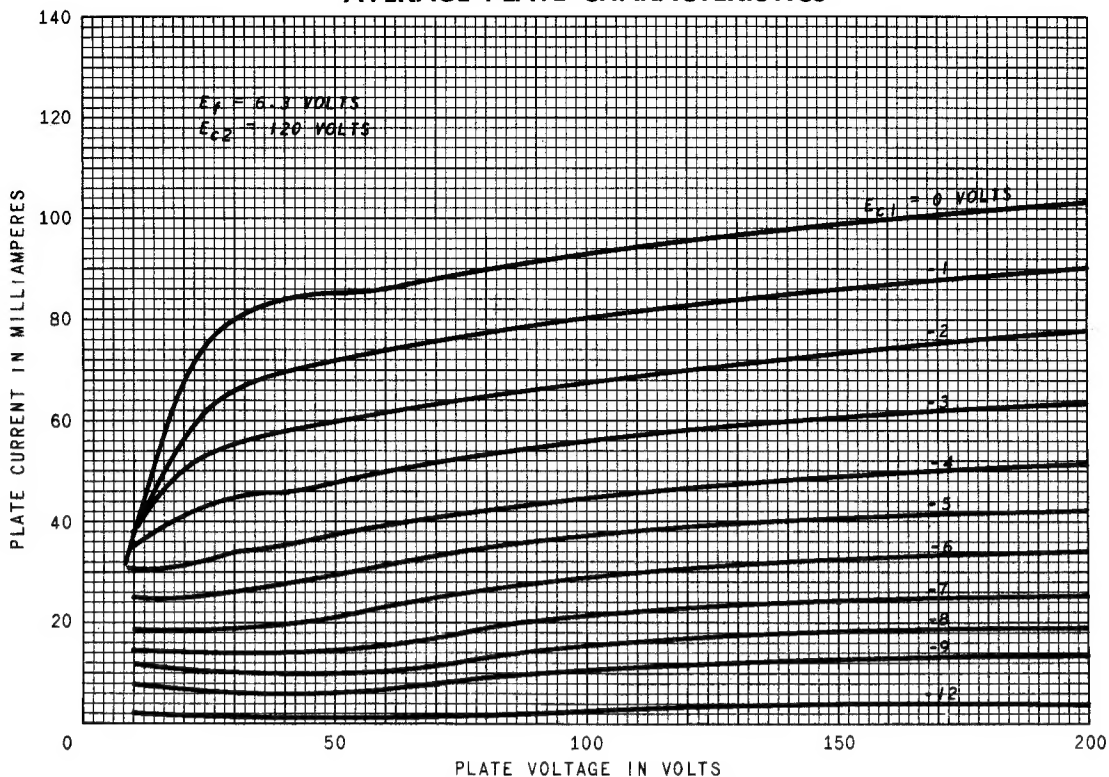
Plate Voltage	120	Volts
Screen Voltage	120	Volts
Cathode Bias Resistor	120	Ohms
Plate Resistance (Approx)	12500	Ohms
Transconductance	8000	Micromhos
Plate Current	35	Milliamperes
Screen Current	12	Milliamperes
Load Resistance	2500	Ohms
Power Output (Approx)	1.3	Watts
Plate Current (Max) for $E_{c1} = -20$ Volts	1.0	Milliampere

CHARACTERISTICS AND TYPICAL OPERATION

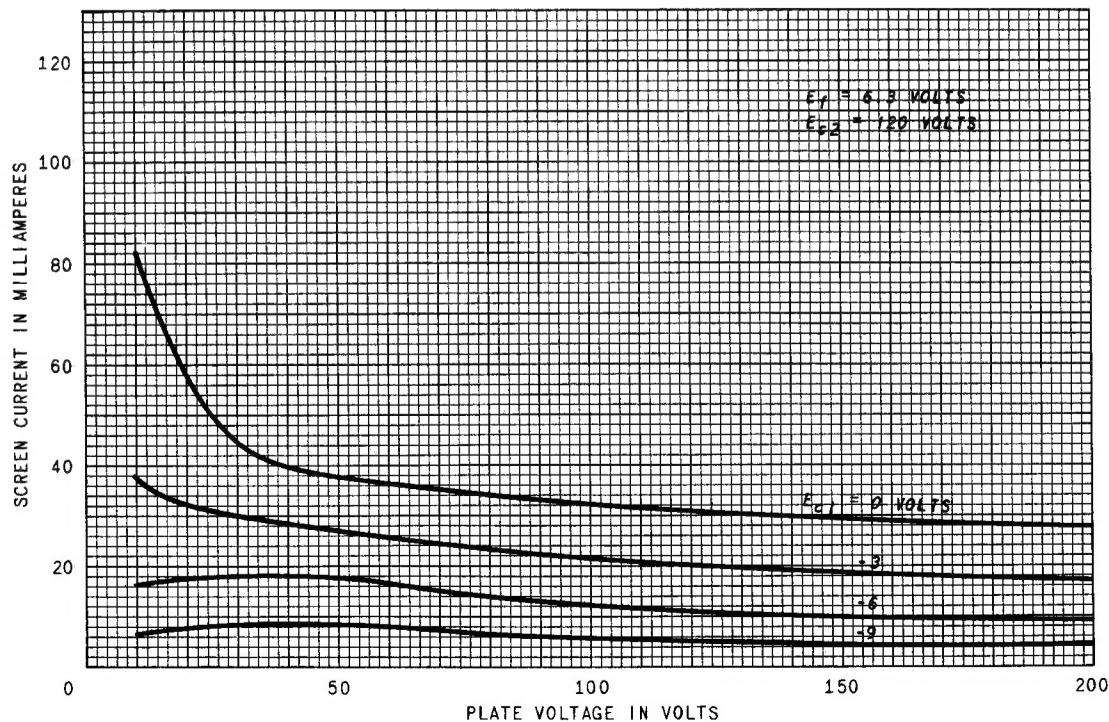
With external shield #316 connected to cathode

* Fixed bias operation is recommended only when the plate and screen dissipation is less than 70 percent of the design-center maximum ratings.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Department, Electronics Division



Schenectady, N. Y.